PTO/SB/05 (01-04) Approved for use through 07/31/2006. OMB 0651-0032 U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

| Attorney Docket No. | ARL 03-83 | |
|------------------------|------------------------|------------|
| First Inventor | Chen | 0T0 |
| Title | Molecular Beam Epitaxy | .s. 771 |
| Express Mail Label No. | | 80, |
| ** | | |

| | | Express man zaser re: | | | | |
|--|--|---|--|--|--|--|
| See MPEP ch | APPLICATION ELEMENTS napter 600 concerning utility patent application contents. | ADDRESS TO: Commiss P.O. Box | Patent Application ioner for Patents 1450 a VA 22313-1450 | | | |
| 2. Applica See 37 3. Specific (preferre - Descrip - Cross - Statem - Refere or a co - Backgr - Brief S - Brief D | ansmittal Form (e.g., PTO/SB/17) an original and a duplicate for fee processing) nt claims small entity status. CFR 1.27. cation [Total Pages3_5] ad arrangement set forth below) ptive title of the invention Reference to Related Applications ent Regarding Fed sponsored R & D noce to sequence listing, a table, mputer program listing appendix round of the Invention ummary of the Invention ummary of the Invention escription of the Drawings (if filed) ad Description | ii. Paper | endix) Sequence Submission Form (CRF) Ence Listing on: ED-R (2 copies); or | | | |
| - Claim(| s) | ACCOMPANYING A | PLICATION PARTS | | | |
| - Claim(s) - Abstract of the Disclosure 4. Drawing(s) (35 U.S.C. 113) [Total Sheets | | ation-in-part (CIP) of prior application No.: | | | | |
| | 19. CORRESPON | DENCE ADDRESS | | | | |
| ☑ Custome | er Number: 37064 | OR Corre | spondence address below | | | |
| Name Office of Command Counsel, U.S. Army Materiel Command | | | | | | |
| , | ATTN: AMCCC-B-IP | | | | | |
| $\Delta ddracc$ \vdash | 9301 Chapek Road | | | | | |
| 0.4 | Fort Belvoir | State VA | Zip Code 22060-5527 | | | |
| | | elephone 703-806-8244 | Fax 703-806-8874 | | | |
| Name (Print/Typ | | | | | | |
| Signature | | Negistration No. (Attorney/Agent) | 25,515 | | | |
| Signature | Elward LStelans | | Date 3/19/04 | | | |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mall Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

| (\$) | 1892 |
|------|------|
|------|------|

| Complete if Known | | | | |
|----------------------|------------|--|--|--|
| Application Number | | | | |
| Filing Date | | | | |
| First Named Inventor | Chen | | | |
| Examiner Name | | | | |
| Art Unit | | | | |
| Attorney Docket No. | ART, 03-83 | | | |

| METHOD OF PAYMENT (check all that apply) | | FEE CALCULATION (continued) | | | | |
|--|------------------|-----------------------------|---------------|----------------------|--|----------|
| Check Credit card Money Other None | 3. A | DDITI | ONAL | . FEE | S | |
| Deposit Account: | | Entity | Small | Entity | | |
| Deposit 19~2201 | Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Con Doid |
| Account 1902201 | 1051 | 130 | 2051 | • • | Surcharge - late filing fee or oath | Fee Paid |
| Deposit | 1052 | 50 | 2052 | | Surcharge - late provisional filing fee or | |
| Account Name US Army Materiel Cmd | | | | | cover sheet | |
| The Director is authorized to: (check all that apply) | 1053 1812 | 130 2,520 | 1053 | | Non-English specification For filing a request for ex parte reexamination | |
| X Charge fee(s) indicated below X Credit any overpayments | 1804 | 920* | 1804 | • | Requesting publication of SIR prior to | |
| Charge any additional fee(s) or any underpayment of fee(s) | 1004 | 320 | 1004 | 320 | Examiner action | \vdash |
| Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account. | 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| FEE CALCULATION | 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1. BASIC FILING FEE | 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| Large Entity Small Entity | 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| Fee Fee Fee Fee Fee Paid Code (\$) Code (\$) | 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | |
| 1001 770 2001 385 Utility filing fee | 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| 1002 340 2002 170 Design filing fee | 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1003 530 2003 265 Plant filing fee | 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1004 770 2004 385 Reissue filing fee | 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1005 160 2005 80 Provisional filing fee | 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| SUBTOTAL (1) (\$) 770 | 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE | 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | |
| Fee from | | 1,330 | 2501 | | Utility issue fee (or reissue) | |
| Extra Claims below Fee Paid Total Claims 68 .20** = 48 x 18 = 864 | 1502 | 480 | 2502 | | Design issue fee | |
| Independent 6 31 V 86 258 | 1503 | 640 | 2503 | | Plant issue fee | |
| Claims Multiple Dependent = \\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 1460 | 130 | 1460 | | Petitions to the Commissioner | |
| | 1807 | 50 | 1807 | | Processing fee under 37 CFR 1.17(q) | |
| Large Entity Small Entity Fee Fee Fee Fee Fee Description | 1806 | 180 | 1806 | | Submission of Information Disclosure Stmt | \vdash |
| Code (\$) Code (\$) | 8021 | 40 | 8021 | 1 40 | Recording each patent assignment per property (times number of properties) | l |
| 1202 | 1809 | 770 | 2809 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1203 290 2203 145 Multiple dependent claim, if not paid | 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1204 86 2204 43 ** Reissue independent claims over original patent | 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | |
| 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent | 1802 | 900 | 1802 | 900 | · · · | |
| | Other | fee (sp | ecify) _ | | - · · · · · · · · · · · · · · · · · · · | |
| SUBTOTAL (2) (\$) \\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \ | *Red | | | - | ee Paid SUBTOTAL (3) (\$) | |
| The state of the s | - Company of the | | CANADA CANADA | POTENTIAL CONTRACTOR | The state of the s | W |

SUBMITTED BY

(Complete (if applicable))

Name (Print/Type)

Edward L. Stolarun

(Registration No. (Attorney/Agent))

Z5,515

Telephone 703-806-8244

Signature

Date

3/19/04

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NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)

| First Named Inventor | | Chen | | | |
|----------------------|--|--------------|--|--|--|
| Title | Molecular Beam Epitaxy Growth of Ternary and Quanternary | | | | |
| Attorn | ey Docket Numbe | er ARL 03-83 | | | |

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

3/19/04
Date

Signature

703-806-8244

Edward L. Stolarun, Reg# 25, 515

Telephone number

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application upon filing.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

This collection of information is required by 37 CFR 1.213(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.